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Research Article

A survey on the knowledge and attitudes among the students of Al-Azhar University to HIV/AIDS, the Gaza Strip-Palestine

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Abstract

Objective: The study assessed the knowledge and attitudes of students' at a university in Gaza regarding HIV/AIDS and identified differences in knowledge about HIV, and attitudes by gender, locality, and social and economic status. **Methods:** This descriptive study targeted 492 students of Al-Azhar University-Gaza. The participants completed self-administered questionnaires that included the following dimensions: socio-demographic, measurements of student's knowledge level and measurement of student's attitudes towards HIV/AIDS. **Results:** Findings showed moderate level of knowledge regarding HIV/AIDS although there was a very low of perception regarding the acceptance and sharing of HIV/AIDS persons. It means that only one third of the study respondents are willingness to be in close touch with people living with HIV or even communication with them, and less than fifty percent thought that it is their right to be engaged in a public or governmental job, stigma and discriminatory attitudes toward HIV/AIDS persons is high only 48% of the students thought it right to employ people living with HIV (PLHIV) and 35.5% refused to work in the same place with PLHIV. **Conclusion:** This study indicates the need for improving the level of knowledge as well as promoting the students' towards positive attitude.

Key words: AIDS, Knowledge, attitude, students, HIV, Gaza

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Filistin Gazze'de Al-Azhar Üniversitesi öğrencilerinin HIV/AIDS'e yönelik bilgi ve tutumlarının değerlendirilmesi

Özet

Amaç: Bu çalışmada Gazze'de üniversite öğrencilerinin HIV/AIDS konusunda bilgi ve tutumları değerlendirilmiş ve cinsiyete, yaşanılan yere, sosyal ve ekonomik duruma göre HIV bilgi durumundaki farklılıklar tanımlanmıştır. **Yöntem:** Bu tanımlayıcı çalışmaya Gazze'de Al-Azhar Üniversitesin'den 492 öğrenci katılmıştır. Öğrenciler sosyodemografik özellikler, HIV/AIDS konusunda bilgi düzey ve tutumlarını içeren anketi kendileri doldurmuştur. **Bulgular:** Öğrencilerin HIV/AIDS'li bireylerle eşya paylaşımı konusunda algı düzeylerinin düşük olmasına karşılık, HIV/AIDS ile bilgileri orta düzeydedir. Çalışmaya katılanların yalnızca üçte biri HIV taşıyan bireylere dokunma ve iletişim kurmaya istekliydi. Öğrencilerin %50'den azı HIV/AIDS'li bireylerin toplumsal veya devlet işlerinde çalışma hakları olduğunu düşünmekteydi. HIV/AIDS taşıyan bireylere karşı damgalama ve ayrımcı tutumlar yüksekti. HIV taşıyan bireylerin çalışma hakkı olduğunu düşünen öğrencilerin oranı %48'di ve öğrencilerin %35.5'i HIV taşıyan bireylerle aynı ortamda çalışmayı istememekteydi. **Sonuç:** Bu çalışma öğrencilerin bilgi düzeylerinin iyileştirilmesi ile birlikte olumlu tutum geliştirmeleri için desteklenmeleri gerektiğinin göstermiştir.

Anahtar kelimeler: AIDS, bilgi, tutum, öğrenciler, HIV, Gazze

Introduction

AIDS is a pandemic disease without borders.[1] since the first case of HIV was recognized in The United States in 1981; HIV has spread rapidly throughout the world. It has been estimated that the number of people living with HIV at the end of 2011 reached 34 million (31.4–35.9 million). An estimated 2.5 million (2.2 million–2.8 million) were newly infected with HIV and an estimated 1.7 million [1.5 million–1.9 million] having lost their lives to AIDS during the same year (2011).[2]

Palestine is one of Mediterranean countries that has reported a low incidence of HIV/AIDS. In 2012, the Palestinian Central Bureau of Statistics (PCBS) estimated the number of the Palestinian population as 4.29 million; 2.65 million in the West Bank and 1.64 million in the Gaza Strip. Culture, eastern traditions and religion play an important role in HIV prevention. According to the Palestinian Ministry of Health 2014, the total number of reported cases since the first case was detected in 1988 until 2014 was 84 cases. Of those, 69 were AIDS cases and 15, asymptomatic HIV carriers. The predominant mode of transmission was heterosexual, followed by blood and blood products according to the Ministry of Health report.[3] The major factors that makes this study interesting is the high rate of stigma, the lack of knowledge about the disease and its mode of transmission in addition to the shortage of the drug supply and the cost of the drug. Young people are particularly vulnerable to the HIV pandemic. Young people aged 15 to 24 years represented over half of all the new infected cases worldwide. Roughly, worldwide, there are more than five new cases every minute, which means that 6,000 young people become infected with HIV daily.[4] It has been estimated that more than 50% of the HIV\AIDS cases in the United State of America are among adults aged less than 25 years. Moreover, university students in China are likely to be one of the affected target populations in that country[5]. In China also, rapid development of economy and the influence of mass media on the perception

of sex, and the changes of traditional values and other factors prompt changes of university students in their behaviors and attitudes.[5]

The percentage of respondents in a survey that conducted by the Palestinian Central Bureau of Statistics PCBS) who knew that HIV is transmitted through sexual encounters, blood and contaminated injections was at or above 90%, regardless of age, gender or location (West Bank/East Jerusalem and Gaza). Among Palestinian youth, the vast majority of respondents 99.6% report having heard of either HIV or AIDS (99.4% of those aged 15-19 years old to 99.7% for both the 20-24 and 25-29 years-old). Gender differences were negligible across all age groups as to whether or not respondents had heard of HIV or AIDS.[6]

In an assessment conducted by UNICEF 2011 the results showed that more than 90 % of survey respondents, regardless of age, gender or location, knew that HIV is transmitted through sexual encounters, blood and contaminated injections. The report also indicated that the protective role of condoms in HIV prevention was not known by an overwhelming majority (64.4% for all surveyed), with youths aged 15-19 far less aware (58%) than those aged 20-24 (68.1%) or 25-29 (70%). Gaps in comprehensive knowledge about HIV and transmission, as well as misinformation, persist, indicating that better information dissemination is needed. [7]

In the study conducted by Husseini and Abu-Rmeileh,[8] aimed to explore Palestinian women's knowledge, perceptions, and attitudes towards HIV/ AIDS and showed that most of the women in the occupied Palestinian territories (OPT) (93.4%) had heard of AIDS and they had fair general knowledge of HIV/AIDS prevention methods and transmission. Among the participants, TV was the main source of information about HIV/AIDS.

The present study aimed to assess students' knowledge and attitudes regarding HIV/AIDS and to identify differences in HIV knowledge, and attitudes by gender, locality, and social and economic status.

Methods

In the Gaza strip 30,071 students were enrolled in higher education. The total registered students in Al-Azhar University-Gaza was 14,282 (47.5% of the total university students), and the female students represented about 50.8% of the Gaza university students.[3]

Study design and target population

The present study was a descriptive in nature, conducted in the fall semester of the academic year 2012-2013 including different student colleges (both males and females) of Al-Azhar University-Gaza.

Sample and sampling

A total of 492 students were selected randomly throughout the main two branches (scientific and literature colleges of the University). A simple random selection based on proportional sampling was derived from each college during five days of data collection. There were two phases of selection technique.

First phase: stratification of the colleges was based on 30 colleges (12 scientific colleges with a total of 5385 students and 18 literature colleges with a total of 8897 students). Five colleges were selected based on a random sample procedure; two out from the scientific and three from of the literature colleges.

Second phase: simple random selection of the 492 students based on the proportional number of students in each college. The Table 1 below shows the distribution of the students:

Table 1. Distribution of the students

Scientific colleges	n	%	Literature colleges	n
Pharmacy	104	55.9	History	108
Chemistry	82	44.1	English	103
			Marketing	95
Total	186	37.7		306

Table 2. The characteristics of the study population (n=492)

Socio-demographic characteristics	n	%
Sex		
Males	156	(31.8)
Females	336	(68.2)
Marital status		
Single	465	(94.6)
Married	27	(5.4)
Location		
North of the Gaza strip	119	(24.2)
Gaza city	243	(49.5)
Middle area	70	(14.1)
South area	60	(12.2)
Family members		
< six member	249	(50.6)
≥ six members	243	(49.4)
Family income		
< NIS 2000 ($500)	187	(38.1)
≥ NIS 2000 ($500)	305	(61.9)
Studying department		
Literature branch	306	(62.2)
Scientific branch	186	(37.8)

Tool of the study

The participants completed self-administered questionnaires that included the following dimensions:

- Socio-demographic characteristics including gender, age, place of residence (northern, middle or southern governorate in the Gaza Strip), number of family members and family income.
- Measurement of student's knowledge level includes general knowledge on HIV causes, mode of transmission, preventative measures, treatment and vaccination, source of knowledge about HIV/AIDS and identification of high risk group for HIV.
- Measurement of student's attitudes towards HIV/AIDS included attitudes towards HIV/AIDS and towards People Living with HIV (PLHIV) among participants. The level of stigma and discrimination was also measured. There were 60 questions.

Data quality

The validity of the self administered questionnaire was conducted by three consultants in the area of epidemiology and public health. The tool was also divided into three separate parts to assure reliability. To assure high confidentiality the data collection tool was self administered, anonymous with an atmosphere of high privacy.

Pilot study

A pilot study was done with 20 students from Al-Azhar University-Gaza. The pilot study indicated that some questions needed to be added; for example printed media as a source of HIV/AIDS information and willingness to do voluntary tests in a confidential and secret way. Modifications to the questionnaire were completed and the twenty completed piloted questionnaires were not considered in our sample.

Ethics

Ethical approval was obtained from Al-Azhar University in addition to informed consent for each participant.

Statistical analysis

Data was analyzed by using statistical package for social science (SPSS WIN version 15), where different variables were processed.

Results

Socio-demographic characteristics of the participants

Approximately all of the students registered in the colleges of Al Azhar University-Gaza agreed to participate in the study with a response rate of 98.4%. The present study included 492 students. 31.8% were males and 68.2% were females; 94.6% of the students were single (Table 2). They were distributed in all the selected colleges of Al-Azhar University-Gaza. The average age of the participants was 19.21 (SD=1.21) years. Students from different localities in the Gaza Strip are enrolled in Al-Azhar University-Gaza, so it was found 49.5% of the study sample was from Gaza city, which is the most modern and crowded city in the Gaza Strip. More than 50% of the surveyed students had fewer than 6 family members. About 38% of the students belonged to families with a monthly income less than NIS 2000 ($500).

Knowledge of HIV/AIDS

According to the study results of all of the students involved in the study 100% had an idea about HIV/AIDS. A higher proportion of students were aware of the fact that HIV is caused by a virus and is fatal disease (97.5% and 96.3% respectively). Almost 63.3% of the participants reported that there are few AIDS-infected cases in our Palestinian community.

18.4% of the students considered HIV/AIDS as hereditary and the others considered it as an infectious disease (Table 3).

Knowledge on methods of HIV transmission

The research highlighted the fact that the majority of the University students are familiar with the most common HIV mode of transmission. The study showed that 92.8% of the respondents know that HIV can be transmitted through sharing injection needles, while 97.5% said through blood transfusion or infected blood products, 75.4% from mother to child during birth and 98% said that HIV can be transmitted through unsafe sexual intercourse.

The research also revealed that there are still a large number of participants who have incorrect knowledge about ways HIV is transmitted. The study revealed that 39.5% of the respondents knew HIV is transmitted through using dishes and sharing food, 29% by coughing and sneezing, 60% by sharing one toilet, 15.5% by shaking hands and 31.3% by insect bites and 34.1% reported that HIV can be transmitted through breastfeeding (Table 4).

Source of knowledge on HIV/AIDS

In regard to the major sources of information on HIV/AIDS, Table 3 shows that the students got the information from TV/radio and internet 87.6%, books/magazine and journals 35.6% followed by health personnel in hospital and primary health care 28.9%. Only 7.3% of the students mentioned their working place as a source of information on HIV/AIDS.

Knowledge regarding the high risk group

It was found that 90.4 % of the University students consider that persons practicing unsafe sex are the highest risk group. Addicted persons and those receiving blood transfusion represent the second highest risk.

There was a high rate of participants who did not know about the treatment, vaccination and recovery form HIV infection. 31.8% did not know whether there is a treatment for HIV/AIDS. Only 58% of respondents said that AIDS is incurable

Table 3. The knowledge of AIDS among the students

Variable	Yes n (%)	No n (%)
Knowledge		
Have you been heard about AIDS?	492 (100)	0.0
Is a virus the cause of AIDS?	480 (97.5)	12 (2.5)
Is it fatal?	474 (96.3)	18 (3.7)
Is it infectious disease	437 (88.8)	55 (11.2)
Is it hereditary disease?	90 (18.4)	402 (81.6)
Are there any infected cases in Palestine?	311 (63.3)	181 (36.7)
Source of information about AIDS		
Media	430 (87.4)	62 (12.6)
Books, article, magazines	175 (35.6)	317 (64.4)
Health centers	142 (28.9)	350 (71.1)
Others (family, awareness sessions, work place)	142 (28.9)	350 (71.1)
The highest susceptible group to be infected by HIV/AIDS		
Addictive's	277 (56.3)	215 (43.7)
Patients received blood transfusion	278 (56.9)	214 (43.1)
Patients set for surgical or dental operations	166 (33.7)	326 (66.3)
Others (Health workers, Hair cutter, Butcher)	177 (36.0)	315 (64.0)

disease, whereas 38.1% said that vaccination for HIV/AIDS is available (Table 4).

Knowledge of students about preventive measures for HIV/AIDS

Table 5 shows that the majority of the students, 98.6%, knew the risks of being infected with HIV can be minimized if a person practices abstinence of unsafe intercourse.

The study shows a high rate of respondents, -48.2%, reported that mosquito network, 22.5% avoiding handshakes, and 97.6% considered that mass media and raising awareness among the community can prevent a person from HIV infections.

Table 4. Knowledge of students about methods of transmission and treatment

Method of transmission	**Yes n (%)**	**No n (%)**	**Don't know n (%)**
Blood transfusion	480 (97.6)	5 (1.0)	7 (1.4)
Mother to baby during pregnancy	370 (75.4)	40 (7.8)	82 (16.8)
Breastfeeding	167 (34.0)	128 (26.0)	197 (40.0)
Unsafe intercourse	482 (98.0)	4 (0.8)	6 (1.2)
Sharing meals and dishes	194 (39.6)	251 (51.0)	46 (9.4)
Using the same toilette	294 (59.7)	126 (25.6)	72 (14.7)
Sneezing and cough	143 (29.0)	266 (54.0)	83 (17.0)
Insect bite	154 (31.3)	227 (46.2)	111 (22.5)
Using of the same injection needle and syringe	457 (92.8)	7 (1.4)	28 (5.7)
Shaking hand and hugging	76 (15.5)	366 (74.3)	50 (10.2)
Knowledge about treatment and vaccination			
Is there an effective treatment for AIDS?	56 (11.3)	280 (56.9)	156 (31.8)
Is there a vaccination for AIDS?	188 (38.1)	174 (35.4)	130 (26.5)
Does AIDS a curable disease?	72 (14.6)	285 (58.0)	135 (27.4)

Table 5. Preventive measures and tools

Can these preventative measures protect from AIDS?	**Yes n (%)**	**No n (%)**
Have Unsafe and illegal intercourse	485 (98.6)	7 (1.4)
Using of mosquito capture tool	237 (48.2)	255 (51.8)
Avoid shaking hand or hugging the infected one	111 (22.5)	381 (77.5)
Raise awareness by using media	480 (97.6)	12 (2.4)
Do Lab test for AIDS before marriage	481 (97.7)	11 (2.3)
Avoid sharing meals and dishes	259 (52.6)	233 (47.4)

Stigma and Discrimination

(1) Moral and religious attitudes of students towards AIDS/HIV infected persons

The data concerning students' attitudes are listed in Table 6. Although the majority of students had negative attitudes toward HIV/AIDS, there were also some misconceptions: 47.8% of the students disagreed with the statement "HIV/AIDS does not infect the Palestinian community; 20.7% agreed that HIV/AIDS is a punishment from God and 26% were not sure; 15.3% agreed that "lack of religious and moral commitments could cause HIV/AIDS infection" and 34.6% were not sure. 52.4% of the students agreed that you can protect yourself from HIV/AIDS if you engaged in sport and you are well nourished.

(2) Willingness to come into contact PLHIV

It is particularly noteworthy that many people are reluctant (unwilling) to engage in normal social relations with HIV positive people. Students were generally quite unwilling to come into contact with HIV positive people. Almost half of respondents, 45%, would be unwilling to eat or even to share food with an HIV/AIDS infected person; 58.4% also would be unwilling to buy chicken and meat from an HIV/AIDS infected person.

Other situations such as living together 47%, and receiving services such as going to the same barber or hairdresser 70.2%, working together 35.5%, and using toilet/kitchen 47% showed high levels of stigma and discrimination.

Conversely, more than 56.3% of students would be willing to "shake hands" with HIV/AIDS infected people, nearly 83.1% would be willing to care for a sick relative, and 48% would be willing to employ an HIV/AIDS infected person. The survey also showed that 35.5% of the university students believed HIV/AIDS people should not be allowed to participate in the educational process.

(3) Attitudes Regarding the Rights and life values of PLHIV

Three quarters of the interviewees, 77.6%, considered that PLHIV still had life value despite being infected. Fewer students, 8.3%, thought that they did not, and 14.1% were not sure.

The survey showed that 83.1% of interviewees expressed their willingness to take care and/or accompany an HIV positive relative to the hospital for treatment. Approximately 70% agreed that HIV-infected individuals should be allowed to participate in social events and ceremonies

On the other hand, more than half 58.4% of the interviewees displayed negative attitudes that they will leave an HIV infected person and preferred isolation of. It was found that 24% of the students said they would be worried if they had shaken hands with an HIV person.

(4) Willingness to do voluntary testing of HIV/AIDS

It was particularly noticed that most of the students, 78.8%, were willing to sit for a laboratory examination concerning HIV. Moreover, 79.4% of the participants expressed willingness to do the test in case of the test will save the confidentiality.

Variables differences

With regard to gender differences, the findings suggested that gender was not associated with HIV/AIDS knowledge and attitudes to questions. The same results were recorded for faculties/branches; there were no statistically significant differences in HIV/AIDS knowledge and attitudes between scientific and literatures students. Differences by locality and their family income also showed no statistically significant differences in relation to the HIV/AIDS knowledge and attitudes to questions.

Table 6. Attitude towards AIDS-suffering patients

	Agree	Neutral	Don't agree
Moral and religious attitudes	**n (%)**	**n (%)**	**n (%)**
People suffering AIDS are immoral	75 (15.3)	170 (34.6)	247 (50.1)
AIDS is a wrath from God	102 (20.7)	127 (25.9)	263 (53.4)
AIDS does not infect Palestinians	79 (16.1)	178 (36.1)	235 (47.8)
Muslim and moral People can be infected	159 (32.4)	118 (23.9)	215 (43.7)
Willingness to come into contact with PLHIV			
I am willing to sharing meals and dishes	131 (26.7)	140 (28.4)	221 (44.9)
I am willing to buy food	118 (23.9)	131 (26.6)	243 (49.5)
I am willing to go to barber suffering AIDS	58 (11.6)	89 (18.2)	345 (70.2)
I am willing to live in the same place	109 (22.1)	152 (30.9)	231 (47.0)
I am willing to work and educate in the same place like universities	180 (36.5	138 (28.0)	174 (35.5)
I don't fear to shake hands and hug	277 (56.3)	97 (19.8)	118 (23.9)
I wash my hands after hand shaking	270 (54.8)	117 (23.8)	105 (21.4)
I am willing to take care of PLHIV	409 (83.0)	56 (11.4)	27 (5.6)
I am willing to employ of PLHIV	236 (48.0)	122 (24.9)	134 (27.1)
Rights and life value of people suffering from AIDS			
The AIDS people must have all human rights	382 (77.6)	69 (14.1)	41 (8.3)
Isolation of the infected people	287 (58.4)	126 (25.6)	79 (16.1)
Isolation of the family of the infected people	74 (15.1)	88 (17.8)	330 (67.1)
The AIDS people should participate in social events and ceremonies	343 (69.7)	101 (20.6)	48 (9.7)

Discussion

Misconceptions about HIV/AIDS were reported among the university students. The misconceptions regarding the causes and modes of transmission of HIV/AIDS among youth need to be deeply investigated. The study showed that almost all of the students had heard of HIV/AIDS, and the majority of them knew that HIV is caused by viral infection and reported that HIV is an infectious disease. Two thirds of the participants reported that HIV was present in Palestine and they were aware of HIV/AIDS etiology.

It was observed in the study that although the large majority of the students had correct knowledge of the most common modes of transmission, such as sharing injected needles and unsafe sex, misconceptions were still held regarding nonsexual routes of transmission. A high percentage, 31.3% of students still believe that mosquitoes are vectors of HIV and 60% thought sharing a toilet with infected people can transmit the virus. These findings were consistent with those of similar studies in China.[6]

In addition, the students also showed limited knowledge about how HIV and AIDS can be transmitted. For example, 29% said that AIDS can be transmitted through coughing or sneezing by an infected person. Similar findings have been reported in other countries.[8,9,1]

Despite University students in Gaza being aware of main modes of HIV transmission, a gap still existed about modes that do not transmit the disease and this was reflected in their attitudes towards AIDS patients. These results were matched with a Kuwait KAP (knowledge, attitude and practice) survey of HIV/AIDS and with a nationwide cross-sectional survey that was conducted among the Malaysian public to assess the knowledge, attitudes, and beliefs about HIV/AIDS and that recommended education and intervention programs to increase the level of knowledge and awareness of HIV/AIDS[10] Another cross sectional study that was done in private schools in Nepal proved that the majority of adolescents in Nepal lacked knowledge about the mode of transmission and prevention of HIV/AIDS.[11] This reflects low knowledge among the participants towards AIDS treatment. Only one third reported that HIV can be transmitted through breastfeeding (mother to child transmission MTCT). This requires intervention programs to emphasize the MTCT of HIV because the risks of infection to the new born by the infected mother are high. A higher proportion of the university students indicated that abstinence of unsafe intercourse and raising awareness through media campaigns among the community as the major ways of HIV/AIDS prevention. This can be taken as a good start because it has been reported in Tanzania that about 76.8% of HIV infections are due to heterosexual contacts.[10] So efforts in advocating preventative measures among youth may yield good results and keep the low prevalence of HIV/AIDS. These findings also suggest that health education on HIV preventive measures is still required because students should know all methods that they can use to protect themselves from infection.

The present study showed that TV/internet usage was the most common way for participants to receive information about HIV/AIDS. Mass media, computer, internet and TV are accessible to the broader student. Future education campaigns on HIV/AIDS would best be conducted via mass media. There is overwhelming evidence for the effectiveness of mass media in raising awareness and increasing knowledge in developing countries.[11]

The present study showed a high number of students has a shortage of knowledge about the treatment or vaccination or recovery from HIV infections. Moreover, only 58% of respondents said that AIDS is an incurable disease, 38.1% said that vaccination for HIV/AIDS is known. There are effective treatments for HIV infections; so that, a person with HIV can live during their whole life span without any illness due to HIV. However, the treatment of HIV infections is not curative. An effective

treatment of HIV infection exists and millions of people are receiving this treatment today.

Students also indicated that they need much more information on HIV/AIDS. The study showed that most of the students reported commercial sex workers were in the high risk group while more than half of the participants considered injected drug users and patients in need of blood transfusions are at the highest risk.

The present findings indicate that a majority of the students were aware of the HIV/AIDS risks. However, there is a need for improvement since a considerable percentage of the participants incorrectly thought that other groups likes health workers, hairdressers and meat sellers are at high risk.

No statistical differences were recorded for different variables of gender, faculties, locality or economical status in relation to HIV/AIDS knowledge and attitudes. This could be due to the homogeneity of the Palestinian culture and no differences related to different areas or to educational levels, or between boys and girls. Since boys and girls have the same educational level this might play a role in the absence of any difference in their knowledge.

Stigma and Discrimination

Stigma and discrimination are common among the University student in the Gaza Strip. A clear co-variation exists between a low level of knowledge and high levels of discriminatory attitudes, indicating a significant need to improve information coverage HIV/AIDS. Preventing stigma and discrimination is a collective task shared by all people.[12]

Hepatitis B or C, and AIDS are stigmatized and they are associated with individual behaviors, particularly behaviors that may not conform to social norms. HIV/AIDS-related stigma and discrimination are barriers to the effectiveness of voluntary counseling, testing and accessing care in many settings.[13]

There is no doubt that a person who lives all his life with a single sexual partner is at very low risk. Such a lifestyle may be a result of personal choices, strong love, good knowledge on HIV and other risks, religion, etc. However, there may be many factors influencing a person's ignorance or unawareness about HIV, or their stigma against HIV infected people. One of these factors may be also religion. So religion may be a positive or negative factor for HIV prevention.

Although HIV is not readily transmitted in the majority of workplace settings, only 48% of the students thought it right to employ people living with HIV (PLHIV) and 35.5% refused to work in the same place with PLHIV. The supposed risk of transmission has been used by numerous employers to terminate or refuse employment. There is also evidence that where people living with HIV/AIDS are open about their sero-positive status at work they are likely to experience stigmatization by others. Employment discrimination on the basis of HIV status has been reported in the media, NGOs and medical field.[14]

In the present study, students reported concern about the risks posed to the wider community by the presence of HIV-positive individuals living in the community. This is due in part to the fear of HIV as an incurable and fatal infectious disease, and in part to the fact that people have inaccurate and incomplete information about the ways in which HIV can be transmitted. Misinformation and fear will increase the level of the stigma and discrimination against PLHIV. Implementation of stigma reduction programs has primarily been addressed among youth to remove the root causes of stigmatizing attitudes and discrimination[15].

Regarding to the ratio of female to male students, it was 50.8% female among all Gaza universities; but it was 68.2% in our sample. This might be as a result of female dominance such as pharmacy and

marketing where most of the enrolled students are females.

On average of 80% indicated that they are willing to be tested if the result will be confidential and the test will be voluntary and organized. Confidentiality of medical information has been considered a central element of the rights of PLHIV in many nations. These findings agree with what was recorded in Asia and the Pacific region that high numbers of respondents were unsure about, or doubted the confidentiality of their medical and health records.[13] This principle of ethical and human rights recognizes that all people have the right to the privacy of their personal medical conditions. This applies fully to HIV infections and AIDS.[16] Our recommendations are that efforts should be made to provide accurate information and address misconceptions about HIV transmission. It will also be important to target youth and adolescents in HIV prevention campaigns to focus not only on general knowledge about HIV but also on scientific knowledge about HIV/AIDS transmission and, particularly, how it is not transmitted.

Recommendations

It is recommended that awareness campaigns are needed to spread the information about HIV/AIDS to educate people about AIDS and its modes of transmission. Increasing knowledge regarding treatment and vaccination is required so the government should focus on ensuring adequate knowledge.

Limitations of the study

The proportion of the females was greater than in the population, this was due to sampling problem as a result of female dominant study areas, such as pharmacy and marketing where most of the enrolled students are females.

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